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Application No. 10/602,364
Amendment A

Amendments To The Claims

Claim 1 (currently amended): A polyphase device comprising:
a first transistor having a first collector, a first base and a first emitter, the first base adapted to receive a positive portion of an input signal;
a second transistor having a second collector, a second base and a second emitter, the second base adapted to receive a negative portion of the input signal, the first transistor and the second transistor adapted to drive the R-C polyphase network;
an R-C polyphase network having a first input coupled to the first collector and a second input coupled to the second collector;
the R-C polyphase network including an inductor;
the R-C polyphase network having first output and a second output, the first output and the second output offset in phase; and
the R-C polyphase network including the inductor adapted to provide bandpass filtering of the first output and the second output;
wherein the first output and the second output are offset in phase by approximately 90 degrees.

Claim 2 (currently amended): The device of claim 1 wherein the inductor is coupled ~~in parallel~~ to an input of the R-C polyphase network.

Claim 3 (original): The device of claim 1 wherein the inductor is in resonance with a capacitive reactance of the R-C polyphase network.

Claim 4 (canceled)

Claim 5 (original): The device of claim 1 wherein the inductor is adapted

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to reduce unwanted harmonics and spurious content in the first output and the second output.

Claim 6 (currently amended): The device of claim 1 wherein the inductor comprises:

a first inductor coupled to ~~in parallel with~~ the first input of the R-C polyphase network; and

a second inductor coupled to ~~in parallel with~~ the second input of the R-C polyphase network.

Claim 7 (original): The device of claim 1 wherein the first output and the second output are amplified relative to the input signal.

Claim 8 (original): The device of claim 1 wherein the R-C polyphase network comprises a two-stage R-C polyphase network.

Claim 9 (currently amended): A polyphase device comprising:

a transistor having a collector, a base and an emitter;

an R-C polyphase network having an input coupled to the collector, the transistor adapted to drive the R-C polyphase network; and

the R-C polyphase network including an inductor, such that the R-C polyphase network and the inductor are adapted to provide bandpass filtering of an a first output and a second output of the R-C polyphase network;

wherein the first output and the second output are offset in phase by approximately 90 degrees.

Claim 10 (currently amended): The device of claim 9 wherein the inductor

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is coupled in parallel to the input of the R-C polyphase network.

Claim 11 (original): The device of claim 9 wherein the inductor is in resonance with a capacitive reactance of the R-C polyphase network.

Claim 12 (original): The device of claim 9 wherein the inductor is adapted to reduce unwanted harmonics and spurious content in the output.

Claim 13 (original): The device of claim 9 wherein the output is amplified relative to an input signal coupled to the base and driving the R-C polyphase network.

Claim 14 (currently amended): A method of generating phase offset signals comprising the steps of:

inputting a positive portion of an input signal into a first base of a first transistor;

inputting a negative portion of the input signal into a second base of a second transistor;

causing each of biasing the first transistor and the second transistor to become a conduct current source;

driving an R-C polyphase network having a first input coupled to a first collector of the first transistor and a second input coupled to a second collector of a second transistor, wherein the R-C polyphase network includes an inductor; and

outputting a first output and a second output, the first output and the second output offset in phase, the R-C polyphase network including the inductor causing a bandpass filtering of the first output and the second output;

wherein the outputting step comprises outputting the first output and the second output offset in phase by approximately 90 degrees.

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Claim 15 (currently amended): The method of claim 14 wherein the inductor is coupled ~~in parallel~~ to an input of the R-C polyphase network.

Claim 16 (original): The method of claim 15 wherein the inductor is in resonance with a capacitive reactance of the R-C polyphase network.

Claim 17 (canceled)

Claim 18 (original): The method of claim 14 further comprising reducing unwanted harmonics and spurious content in the first output and the second output.

Claim 19 (currently amended): The method of claim 14 wherein the inductor comprises:

a first inductor coupled to ~~in parallel with~~ the first input of the R-C polyphase network; and

a second inductor coupled to ~~in parallel with~~ the second input of the R-C polyphase network.

Claim 20 (original): The method of claim 14 further comprising amplifying the first output and the second output relative to the input signal.